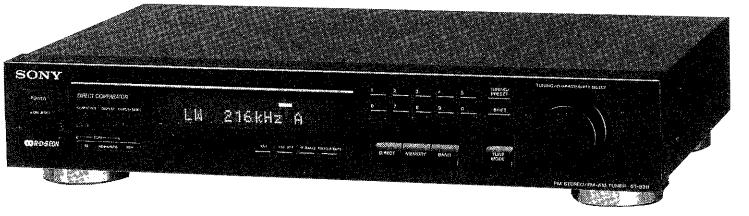
ST-S311

SERVICE MANUAL

AEP Model
UK Model



SPECIFICATIONS

FM tuner

Frequency range	87.5 - 108 MHz
Antenna terminals	75 Ω unbalanced
Intermediate frequency	10.7 MHz
Sensitivity	(mono S/N 26 dB) 10.3 dBf, 0.9 µV/75 Ω; (stereo S/N 46 dB); 38.5 dBf, 23 µV/75 Ω
Usable sensitivity	10.3 dBf, 0.9 µV/75 Ω (IHF)
Signal-to-noise ratio	(at 40 kHz deviation) 80 dB (mono) 76 dB (stereo)
Harmonic distortion	WIDE 0.04% (mono) 0.05% (stereo) NARROW 0.06% (mono) 0.08% (stereo)
Frequency response	30 Hz - 15 kHz, (+0.2 dB, –0.5 dB)
Separation	50 dB (at 1 kHz)
Selectivity	(at 400 kHz) WIDE 80 dB NARROW 90 dB (at 300 kHz) WIDE 45 dB NARROW 70 dB
Output	(at 40 kHz deviation) 600 mV

AM tuner

Frequency range	EXCEPT IT Model : MW : 531 - 1,602 kHz (9kHz step) LW : 153 - 279 kHz (1 kHz step) IT Model : MW : 522 - 1,611kHz (9 kHz step) LW : 144 - 288kHz (1 kHz step)
Intermediate frequency	450 kHz
Usable sensitivity (with AM loop antenna)	300 µV/m (999 kHz); 1 mV/m (216 kHz)
Signal-to-noise ratio	54 dB (50 mV/m, 999 kHz) 50 dB (50 mV/m, 216 kHz)
Harmonic distortion	0.3% (50 mV/m, 400 Hz)
Selectivity	32 dB

General

Power requirements	UK Model : 240 V AC, 50/60Hz EXCEPT UK Model : 220 – 230V AC, 50/60 Hz
Power consumption	12 W
Dimensions	Approx. 430 mm (W) x 85 mm (H) x 295 mm (D) (17 x 3⅜ x 11⅗ inches)
Mass	Approx. 3.0 kg (6 lb. 10 oz.)
Accessories supplied	Connecting cord (1); AM loop antenna (1); FM antenna (1)

Design and specifications are subject to change without notice.

* IT : Italian model

FM STEREO /FM-AM TUNER

SONY

TABLE OF CONTENTS

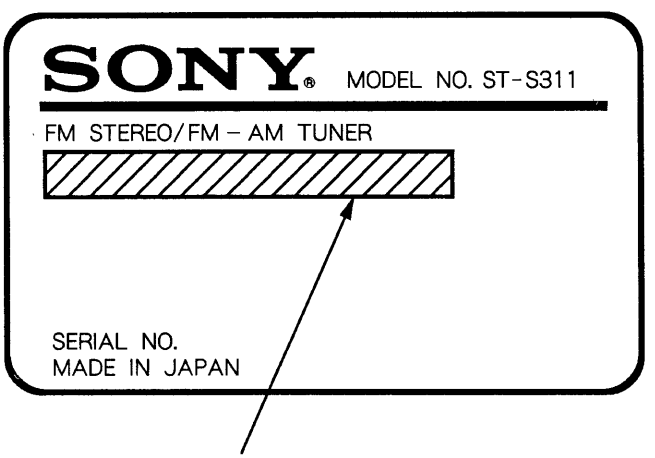
Section	Title	Page
1. GENERAL		3
2. ADJUSTMENTS		4
3. DIAGRAMS		
3-1.	Block Diagram	7
3-2.	Semiconductor Lead Layouts	10
3-3.	Printed Wiring Boards	11
3-4.	Schematic Diagram	13
3-5.	IC Block Diagrams	17
3-6.	IC Pin Description	19
4. EXPLODED VIEWS		20
5. ELECTRICAL PARTS LIST		21

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

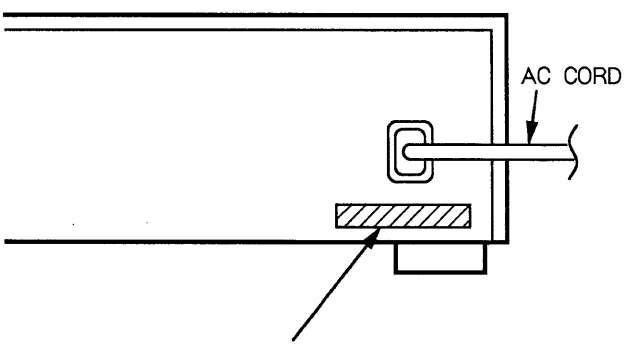
MODEL IDENTICATION

— Specification Label —

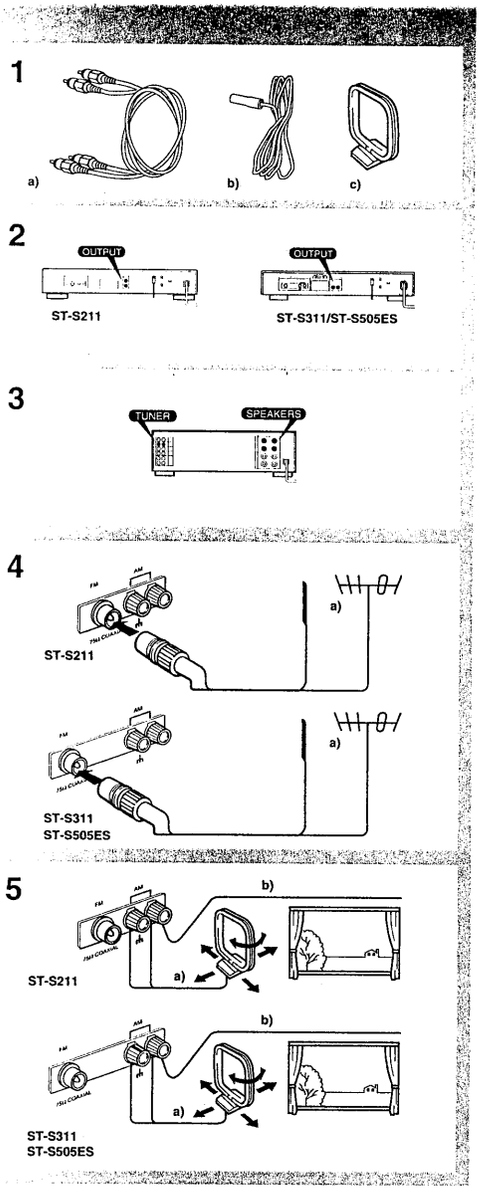


AEP, German, Italian Model : AC 220 – 230~50/60Hz 12W
UK Model : AC 240~50/60Hz

— Back Panel —



AEP, Italian Model : 4-957-875-01
AEP Model : 4-957-875-11
German Model : 4-957-875-21
UK Model : 4-957-875-31



Before Starting

Setting Up

Connect the tuner to the other components in your stereo system as shown in the following steps.

Notes

- For your safety, make sure you unplug the power cords of the components in the system before trying to make any connections. Always plug the power cords in last.
- Plugs and jacks are color coded. Red ones are for the right channel (R). White ones are for the left channel (L).

1 Make sure you have everything shown in the illustration.
a) Connecting cord
b) FM antenna
c) AM loop antenna

2 Plug one end of the connecting cord into the OUTPUT jacks on the back of the tuner.

3 Plug the other end of the cord into the TUNER jacks on the back of the amplifier. Then connect the speakers.

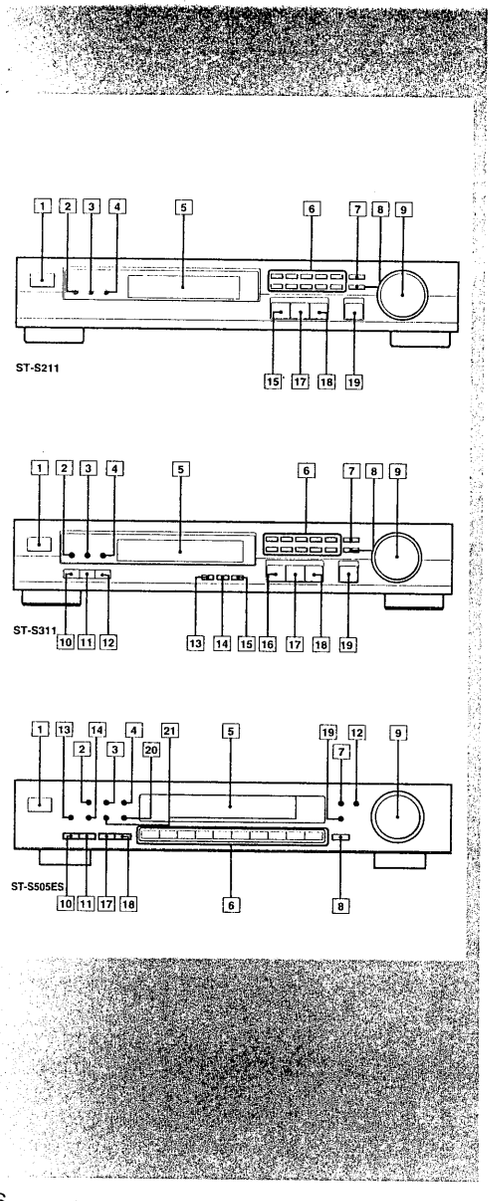
4 Connect the FM antenna.
For best reception, connect the tuner to an outdoor antenna. Use a standard socket connector (not supplied). The supplied antenna should only be for temporary use.

5 Connect the AM antenna.

a) AM loop antenna (supplied)
Attach the two wires to the ⏚ and AM screw connectors. Experiment with the positioning of the antenna for optimum reception.

b) AM antenna extension
For best reception, attach a length of insulated wire (6 - 15 m long) to the AM screw connector in addition to the loop antenna.

6 Plug the power cord into an AC outlet.
For ease of operation, plug the tuner into a switched AC outlet on the back of the amplifier and always keep the tuner turned on. This allows you to turn the power of the tuner on and off by using the power switch of the amplifier.
If you want to have the tuner switch on automatically at a preset time, connect it to the optional Sony Audio Timer.



Identifying the Controls

ST-S211/ST-S311/ST-S505ES

1 Power switch (5, 11, 12)
2 CHARACTER button (17)
3 DISPLAY button (14, 21)
4 DISPLAY MODE button (5)
5 Display window
6 Preset buttons (5, 8, 13, 14, 17)
7 TUNING/PRESET button (6, 7, 15, 16)
8 SHIFT button (13, 14, 17)
9 TUNING/CHARACTER/PTY SELECT knob (ST-S211: TUNING/CHARACTER) (6, 7, 15-17, 24, 25)
10 TA button (22) (ST-S311/S505ES only)
11 NEWS/INFO button (23) (ST-S311/S505ES only)
12 PTY button (24, 25) (ST-S311/S505ES only)
13 ANT ATT button (10) (ST-S311/S505ES only)
14 IF BAND button (10) (ST-S311/S505ES only)
15 STEREO/MUTE button (9)
16 DIRECT button (8) (ST-S311 only)
17 MEMORY button (11-13, 17)
18 BAND button (6-8)
19 TUNE MODE button (6, 7, 15, 16, 24)
20 FM MODE button (ST-S505ES only) (9)
21 MUTING button (ST-S505ES only) (9, 10)

(The numbers in parenthesis indicate the page(s) where the control is described.)

SECTION 1
GENERAL

This section is extracted from instruction manual (ST-S211/S311/S505ES).

SECTION 2
ADJUSTMENTS

• Refer to Adjustment Location on page 6.

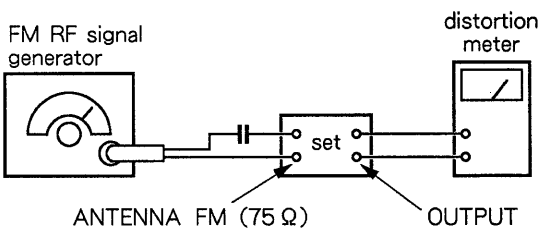
Note : As a front-end (FE101, 421 etc.) is difficult to repair if faulty, replace it with new one.

FM SECTION

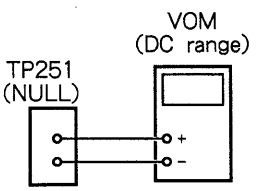
• Standard Setting of FM Stereo RF Signal Generator.

STEREO STANDARD SIGNAL	MONAURAL STANDARD SIGNAL
Carrier frequency : 98MHz Modulation : Audio 1kHz, 40kHz deviation Subchannel 38kHz, 40kHz deviation Pilot 19kHz, 7.5kHz deviation	98MHz 1kHz, 40kHz deviation

FM Discriminator Adjustment (NULL and MONO Distortion)



output level : 10mV (80dB μ)

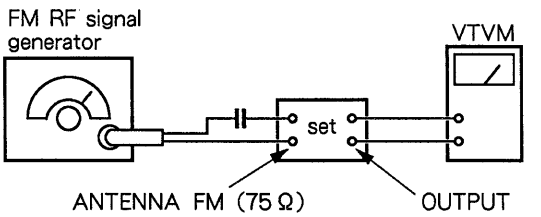


Procedure:

1. Tune the set to 98MHz.
2. Adjust T252 for 0V reading on the VOM. ·····NULL
3. Adjust T253 for a minimum reading on the distortion meter. ·····MONO Distortion
4. Repeat the adjustments of 2 and 3 several times.

Note : When replacing the ceramic filter, perform this alignment.

FM Muting Level Adjustment

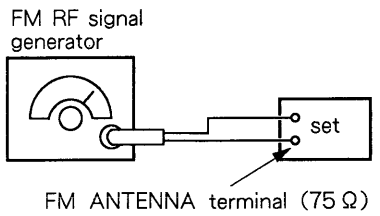


mode : mono
output level : 32 μV (30dB μ)

Procedure:

1. Tune the set to 98MHz.
2. Push the STEREO/MUTE switch and put on the light the "MUTE" indicator in the fluorescent display.
3. Set SSG output level to 32 μV (30dBμ).
4. Adjust RV251 so that "STEREO", "TUNED" light.

FM Signal Level Adjustment

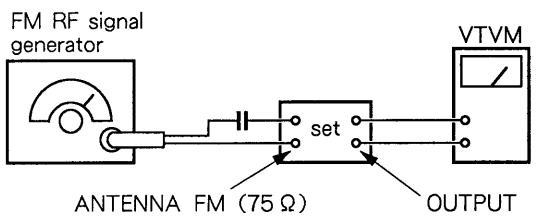


modulation : no modulation
output level : 10mV (80dB μ)

Procedure:

1. Tune the set to 98MHz.
2. Push the DISPLAY MODE button for digital signal meter indication.
3. Adjust RV221 to the place where level and "75dB" indication lights on fluorescent tube.

FM Stereo Separation Adjustment



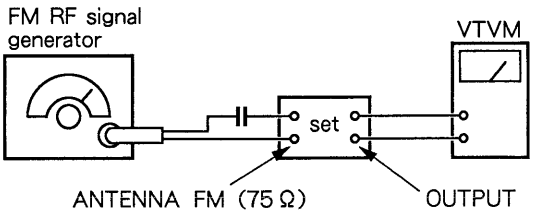
mode : Stereo
output level : 10mV (80dB μ)

Procedure:

FM stereo signal generator output channel	VTVM connection	VTVM reading (dB)
L-CH	L-CH	Ⓐ
R-CH	L-CH	Ⓑ Adjust RV301 minimum reading.
R-CH	R-CH	Ⓒ
L-CH	R-CH	Ⓓ Adjust RV301 for minimum reading.

L-CH Stereo separation : Ⓐ−Ⓑ
R-CH Stereo separation : Ⓒ−Ⓓ
The separation of both channels should be equal.

FM Narrow Gain Adjustment

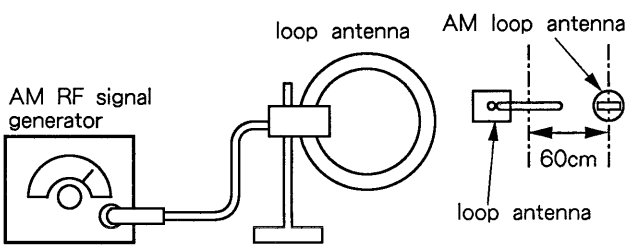


mode : mono
output level : 32 μV (30dB μ)

Procedure:

1. Tune the set to 98MHz.
2. Push the IF BAND switch and put on the light the "NARROW" indicator in the fluorescent display.
3. Set SSG output level to 32 μV (30dBμ).
4. Adjustment RV231 so that the reading on VTVM becomes within 25 μV (28dBμ) − 40 μV (32dBμ).

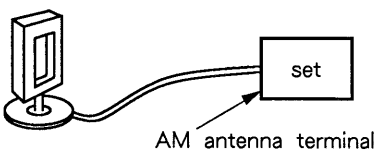
AM SECTION



30 % amplitude modulation by 400Hz signal

Carrier frequency : 216kHz (LW Band)

AM loop antenna



dB μ/m = (SSG output level) − 26dB

AM Signal Level Adjustment

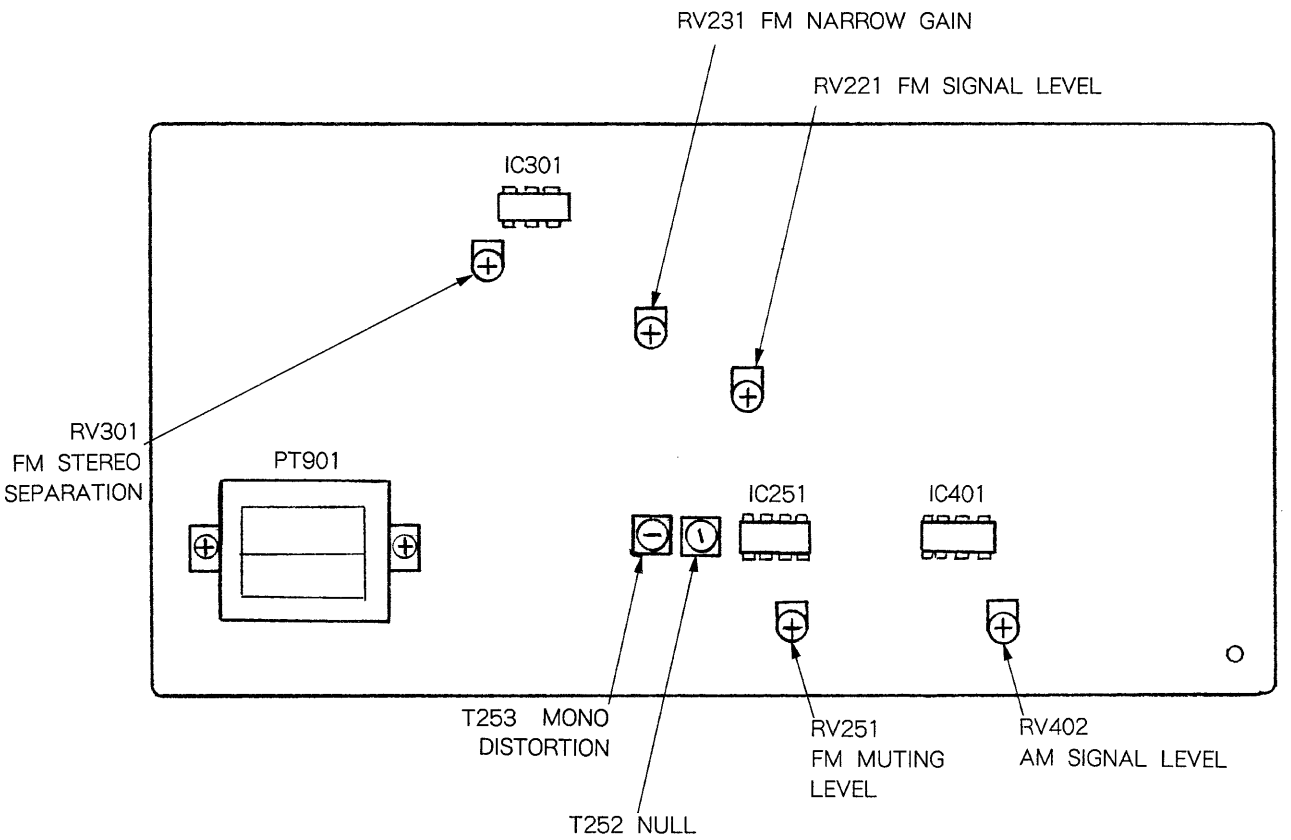
Procedure:

1. Set SSG output level so that antenna input level of the set becomes 5.0mV (74dBμ/m).
2. Adjust RV402 to the place where level 10 in the signal strength indicator turns from dark to light.

Adjustment Location

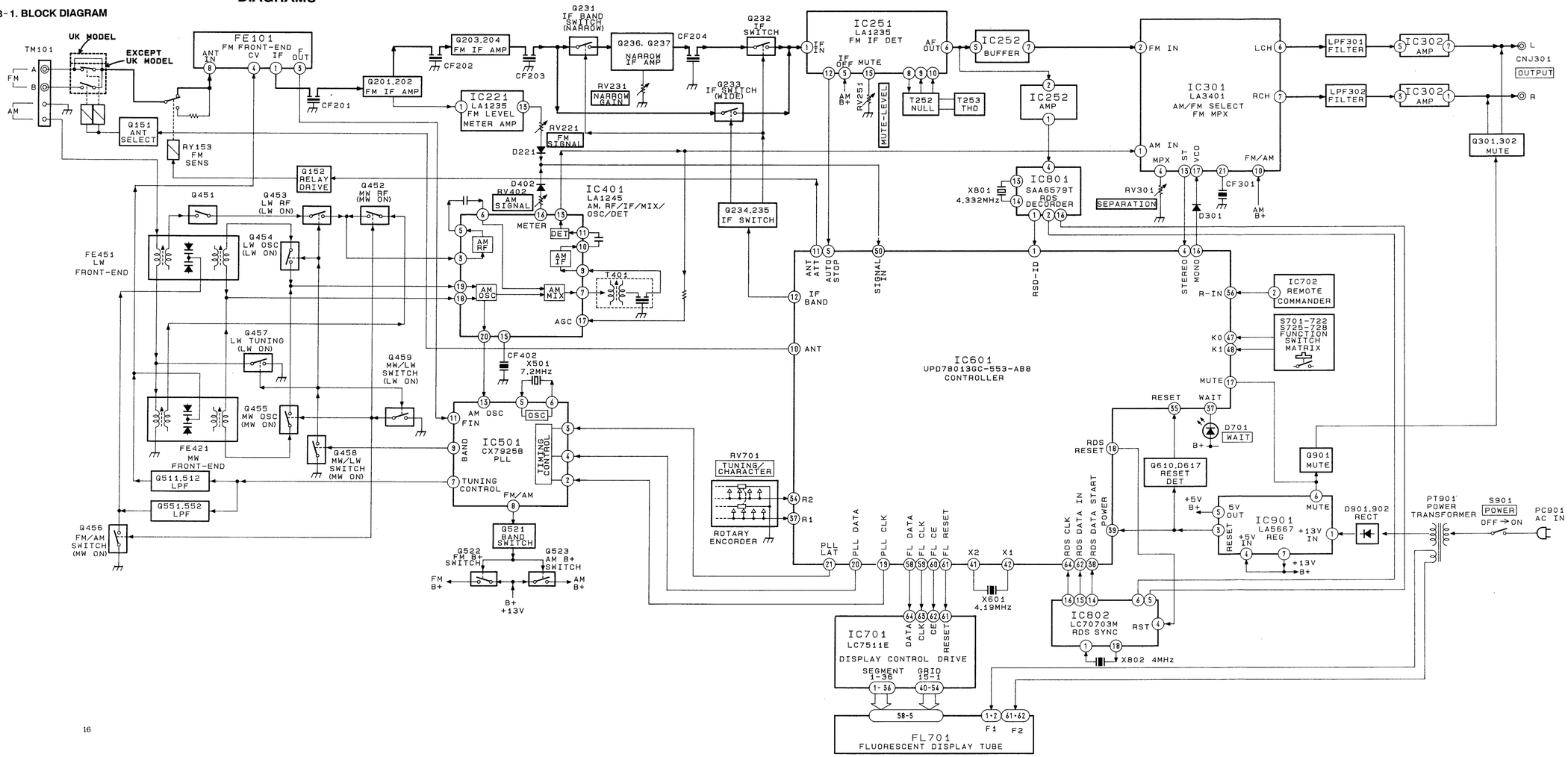
– TUNER BOARD –

(Component Side)



SECTION 3
DIAGRAMS

3-1. BLOCK DIAGRAM

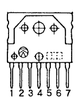


3-2. SEMICONDUCTOR LEAD LAYOUTS

GP1U57XB

1 Vcc
2 Vout
3 GND

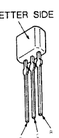
LA5667



DTA144ES
2SC2603-EF
2SC2669OY

DTC114TS
DTC144ES
2SA1175-HFE
2SC3623A-LK

LETTER SIDE

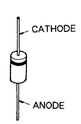


2SC3112-B

2SK161-YGR

2SK246-GR3

10E2



1SS352

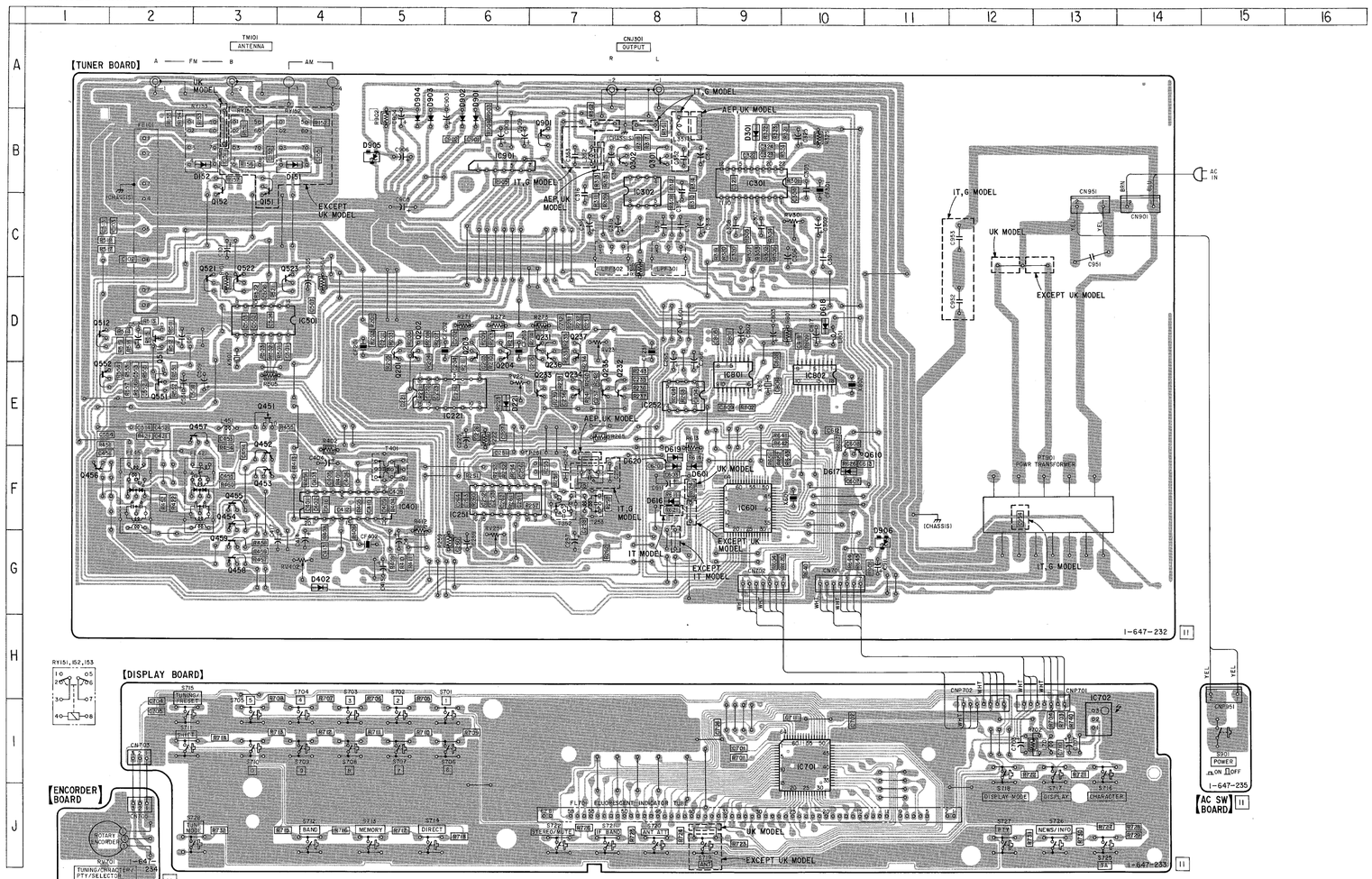
● Semiconductor Location

Ref. No.	Location	Ref. No.	Location
D151	B-4	Q152	B-3
D152	B-3	Q201	D-5
D221	D-6	Q202	D-5
D301	B-9	Q203	D-6
D402	G-4	Q204	D-6
D601	F-8	Q231	D-7
D616	F-8	Q232	E-7
D617	F-10	Q233	E-7
D618	D-10	Q234	E-7
D619	F-8	Q235	E-7
D620	F-8	Q236	D-7
D901	B-6	Q237	D-7
D902	B-6	Q301	B-8
D903	B-5	Q302	B-8
D904	B-5	Q451	E-3
D905	B-5	Q452	F-3
D906	G-11	Q453	F-3
		Q454	F-3
IC221	E-5	Q455	F-3
IC251	F-6	Q456	F-1
IC252	E-8	Q457	E-3
IC301	B-9	Q458	G-3
IC302	B-8	Q459	G-3
IC401	F-5	Q511	D-2
IC501	D-4	Q512	D-1
IC601	F-9	Q521	C-3
IC701	I-10	Q522	C-3
IC702	I-13	Q523	C-4
IC801	E-9	Q551	E-2
IC802	E-10	Q552	E-1
IC901	B-6	Q610	F-10
		Q901	B-7
Q151	B-3		

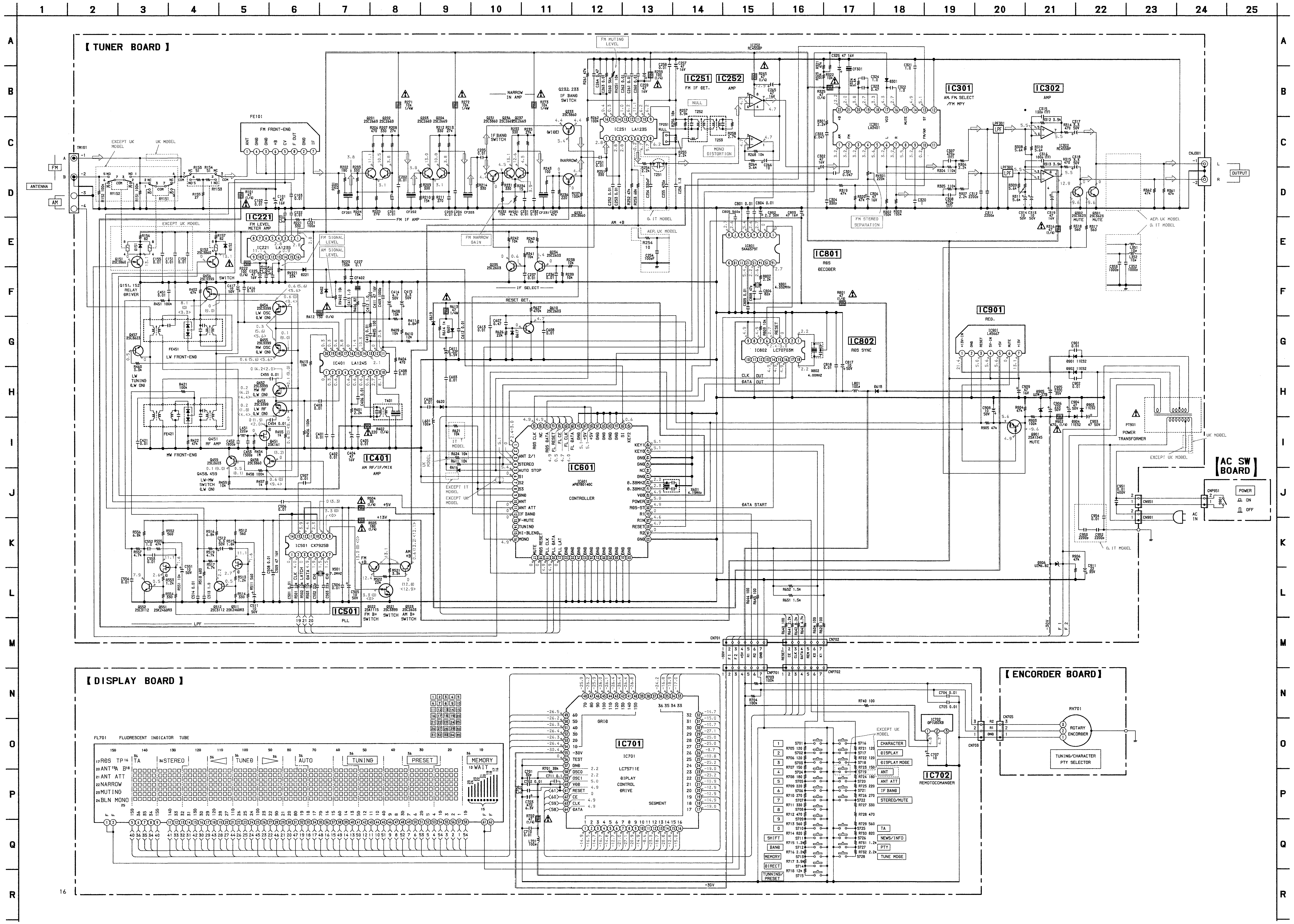
Note on Mounting Diagram :

- ○—— : Parts extracted from the component side.
- ▨ : Pattern on the side which is seen.
- G: German
- IT: Italian

3-3. PRINTED WIRING BOARDS



3-4. SCHEMATIC DIAGRAM



Note on Schematic Diagram :

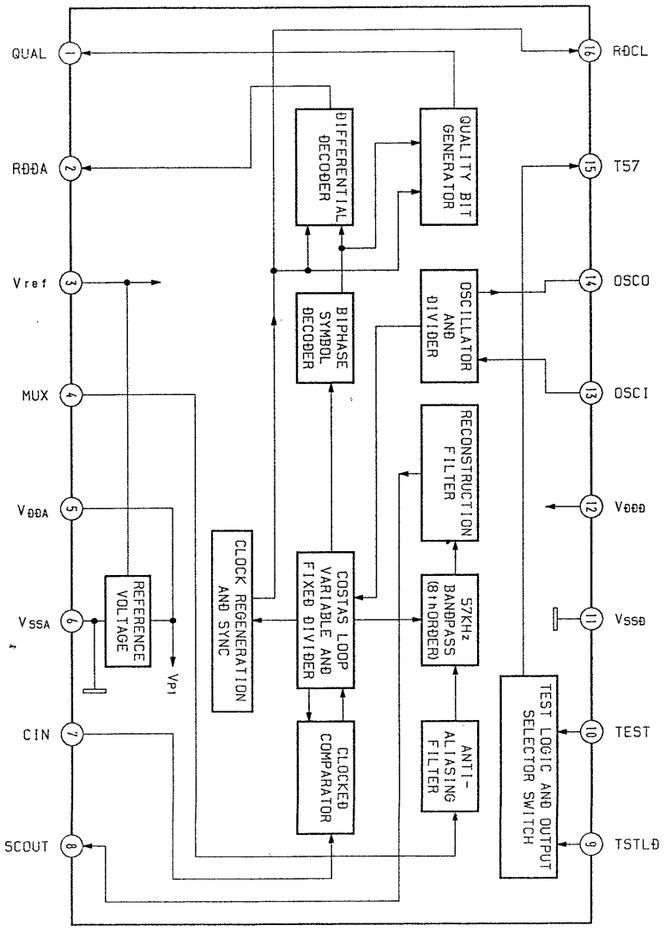
- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¹⁄₄ W or less unless otherwise specified.
- △ : internal component.
- -[W]- : nonflammable resistor.

Note : The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

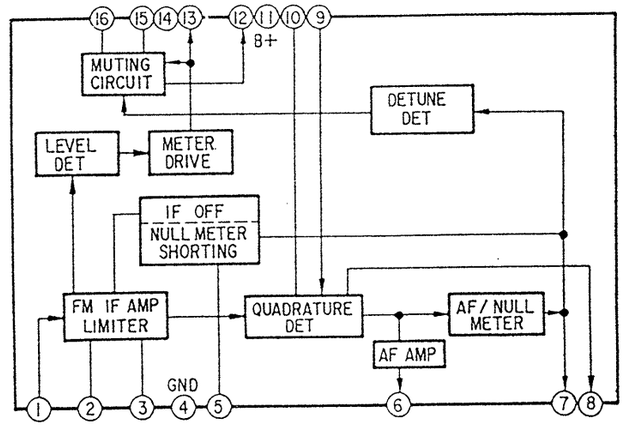
- ▬▬▬ : B + Line.
- ▬ ▬ ▬ : B − Line.
- ☐ : adjustment for repair.
  - no mark : FM
  - ( ) : MW
  - < > : LW
- Voltages are taken with a VOM (input impedance 10 MΩ).
- Signal path.
  - ⇨ : FM
- G: German
- IT: Italian

3-5. IC BLOCK DIAGRAMS

• IC801 SAA6579T-T

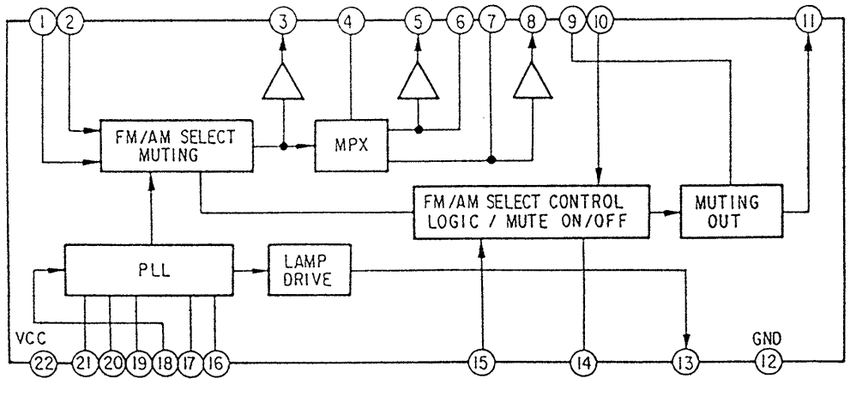


• IC221, 251 LA1235

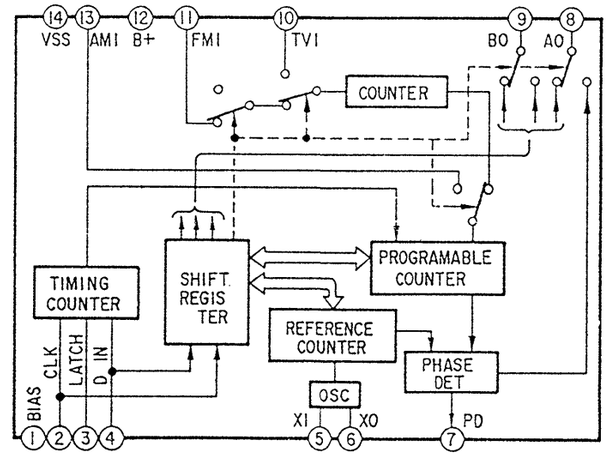


• IC401 LA1245

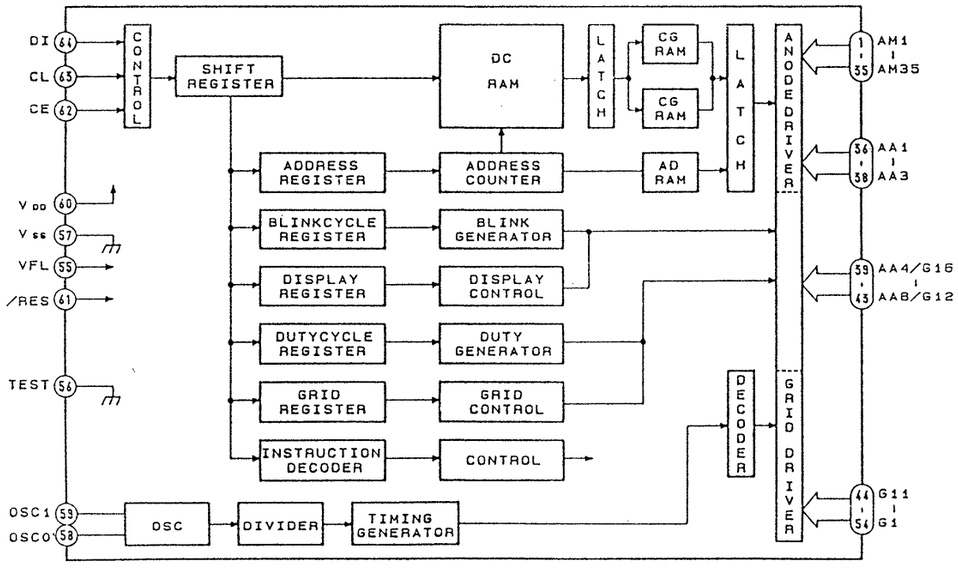
• IC301 LA3401



• IC501 CX7925B



• IC701 LC75711E



3-6. IC PIN DESCRIPTION

● **IC601 μPD78013GC-518-AB8**

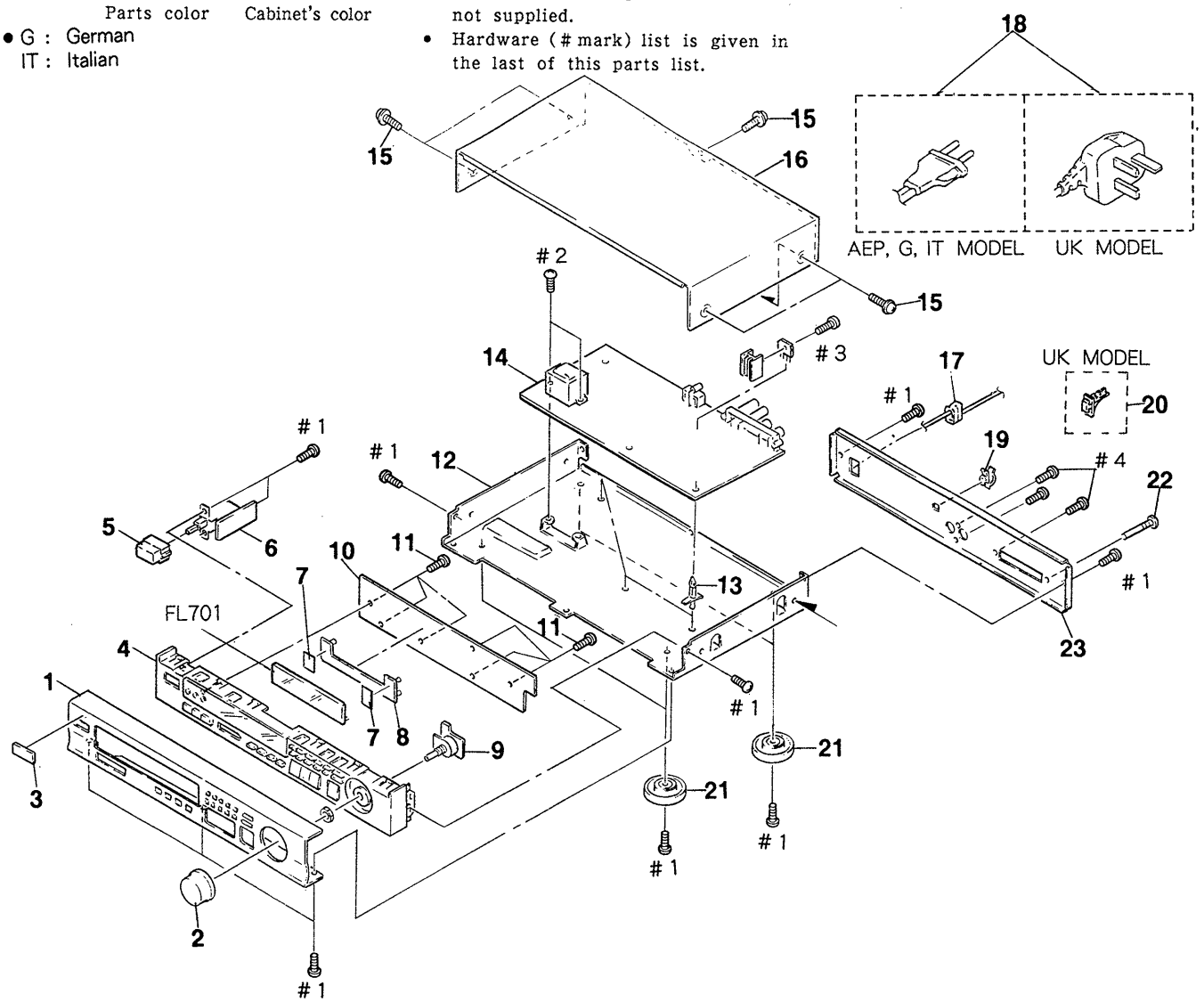
No.	Pin Name	I/O	Description
1	RDS – ID	I	RDS-ID detection input
2	GND		
3	ANT 2/1	I	Antenna terminal select (UK MODEL). GND (EXCEPT UK MODEL).
4	ST	I	STEREO display detection
5	AST	I	AUTO STOP signal detection
6	S1	I	Destination setting
7	S2	I	Destination setting
8	S3	I	Destination setting
9	GND		
10	ANT	O	ANT A/B switching
11	ANT ATT	O	ANT ATT on/off switching
12	IF BAND	O	IF BAND wide/narrow switching
13	F – MUT	O	FM muting on/off
14	TUN	O	Tuning detection
15	HI – B	O	Hi-blend output
16	MONO	O	Enforced monaural output
17	MUTE	O	Muting signal output
18	RDS Reset	O	LC7073 resetting
19	PLL CLK	O	Clock for CX7925
20	PLL DATA	O	Data for CX7925
21	PLL LAT	O	Latch for CX7925
22 – 33	GND		
34	R2		Rotary encoder phase detection
35	RESET	I	System reset
36	RIN	I	Remote controller input
37	R1		Rotary encoder number of rotations detection
38	RD – ST	I	RDS data start
39	POWER	I	Power supply on/off monitor
40	+ 5V		System power supply
41	8.38MHz		
42	8.38MHz		Main system clock oscillation
43	GND		
44	NC		
45 – 46	GND		
47	KEY0		Key input (0)
48	KEY1		Key input (1)
49	KEY2		Key input (2)
50	SI	I	Signal input
51 – 54	GND		
55	+ 5V		Analog power supply of the A/D converter
56	+ 5V	I	Reference voltage of the A/D converter
57	GND		
58	FL DATA	O	Display data for LC75711E
59	FL CLK	O	Clock for LC75711
60	FL CE	O	Latch for LC75711
61	FL Reset	O	Reset for LC75711
62	RDS – DATA	I	RDS data input
63	NC		
64	RDS – CLK	I	RDS data clock input

SECTION 4
EXPLODED VIEWS

NOTE:

- −XX, −X mean standardized parts, so they may have some differences from the original one.
- Color Indication of Appearance Parts
  Example :
  KNOB, BALANCE (WHITE)...(RED)
  ↑ ↑
  Parts color Cabinet's color
- G : German
  IT : Italian
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list is given in the last of this parts list.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.



Ref. No.	Part No.	Description	Remarks
1	A-4353-104-A	PANEL ASSY, FRONT (AEP, G, IT)	
1	A-4353-141-A	PANEL ASSY, FRONT (UK)	
2	4-944-125-01	KNOB (DIA. 44)	
3	4-942-568-01	EMBLEM (NO. 5), SONY	
4	X-4943-556-1	BASE ASSY, PANEL (AEP, G, IT)	
4	X-4943-617-1	BASE ASSY, PANEL (UK)	
5	4-917-460-01	KNOB, POWER	
* 6	1-647-235-11	AC SW BOARD	
* 7	4-932-810-11	CUSHION (FL)	
* 8	4-945-292-01	HOLDER, INDICATION TUBE	
* 9	1-647-234-11	ENCORDER BOARD	
* 10	A-4360-457-A	DISPLAY BOARD, COMPLETE (AEP, G, IT)	
* 10	A-4365-404-A	DISPLAY BOARD, COMPLETE (UK)	
11	4-951-620-01	SCREW (2.6X8), +BVTP	
* 12	4-929-296-51	CHASSIS	
* 13	3-346-265-11	HOLDER, PC BOARD	
* 14	A-4360-460-A	TUNER BOARD, COMPLETE (AEP)	

Ref. No.	Part No.	Description	Remarks
* 14	A-4360-461-A	TUNER BOARD, COMPLETE (G)	
* 14	A-4360-462-A	TUNER BOARD, COMPLETE (IT)	
* 14	A-4360-463-A	TUNER BOARD, COMPLETE (UK)	
15	3-704-366-01	SCREW (CASE) (M3X8)	
16	4-923-457-01	CASE	
* 17	3-703-244-00	BUSHING (2104), CORD	
⚠18	1-575-651-11	CORD, POWER (AEP, G, IT)	
⚠18	1-696-570-21	CORD, POWER (UK)	
* 19	4-949-235-01	HOOK (AEP, G, IT)	
* 20	4-956-370-02	BAND, PLUG FIXED (UK)	
21	4-956-885-11	FOOT (F58175S2W)	
22	3-704-242-01	SCREW, TERMINAL, + BVTP CLAW	
* 23	4-957-875-01	PANEL, BACK (AEP, IT)	
* 23	4-957-875-11	PANEL, BACK (AEP)	
* 23	4-957-875-21	PANEL, BACK (G)	
* 23	4-957-875-31	PANEL, BACK (UK)	
FL701	1-517-177-11	INDICATOR TUBE, FLUORESCENT	

TUNER | DISPLAY | ENCORDER | AC SW

SECTION 5
ELECTRICAL PARTS LIST

NOTE:

When indicating parts by reference number, please include the board name.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

- G : German
  IT : Italian

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- −XX, −X mean standardized parts, so they may have some difference from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- CAPACITORS :
  uF : μF
- RESISTORS
  All resistors are in ohms.
  METAL : metal-film resistor
  METAL OXIDE: Metal Oxide-film resistor
  F : nonflammable
- COILS
  uH : μH
- SEMICONDUCTORS
  In each case, u : μ, for example :
  uA... : μA... , uPA... , μPA... ,
  uPB... , μPB... , uPC... , μPC... ,
  uPD..., μPD...

Ref. No.	Part No.	Description			Remarks
*	A-4360-460-A	TUNER BOARD, COMPLETE (AEP)			
		**********			
*	A-4360-463-A	TUNER BOARD, COMPLETE (UK)			
		**********			
*	A-4360-461-A	TUNER BOARD, COMPLETE (G)			
		**********			
*	A-4360-463-A	TUNER BOARD, COMPLETE (IT)			
		**********			
*	A-4360-457-A	DISPLAY BOARD, COMPLETE (AEP, G, IT)			
		**********			
*	A-4365-404-A	DISPLAY BOARD, COMPLETE (UK)			
		**********			
*	1-647-234-11	ENCORDER BOARD			
		**********			
*	1-647-235-11	AC SW BOARD			
		**********			
	1-690-122-41	REED (WITH CONNECTOR) (2 CORE)			
	1-690-880-11	LEAD (WITH CONNECTOR)			
*	4-932-810-11	CUSHION (FL)			
*	4-945-292-01	HOLDER, INDICATION TUBE			
	4-957-933-01	PLATE, GROUND (G, IT)			
	7-682-548-09	SCREW +B 3X8			
		< CAPACITOR >			
C101	1-124-477-11	ELECT	47uF	20% 25V	
C102	1-164-232-11	CERAMIC CHIP	0.01uF	50V	
C103	1-164-232-11	CERAMIC CHIP	0.01uF	50V	
C151	1-164-232-11	CERAMIC CHIP	0.01uF	50V(AEP, G, IT)	
C152	1-164-232-11	CERAMIC CHIP	0.01uF	50V(AEP, G, IT)	
C155	1-164-232-11	CERAMIC CHIP	0.01uF	50V(AEP, G, IT)	
C201-205					
	1-164-232-11	CERAMIC CHIP	0.01uF	50V	
C221	1-163-117-00	CERAMIC CHIP	100PF	5% 50V	
C222-224					
	1-164-232-11	CERAMIC CHIP	0.01uF	50V	
C225	1-124-477-11	ELECT	47uF	20% 25V	
C226	1-164-232-11	CERAMIC CHIP	0.01uF	50V	
C227	1-163-038-00	CERAMIC CHIP	0.1uF	25V	
C231	1-164-232-11	CERAMIC CHIP	0.01uF	50V	
C232	1-164-232-11	CERAMIC CHIP	0.01uF	50V	
C235	1-163-109-00	CERAMIC CHIP	47PF	5% 50V	
C236	1-164-232-11	CERAMIC CHIP	0.01uF	50V	
C237	1-164-232-11	CERAMIC CHIP	0.01uF	50V	
C251-253					
	1-164-232-11	CERAMIC CHIP	0.01uF	50V	
C254	1-110-335-11	MYLAR	100PF	5% 50V(AEP, UK)	
C254	1-110-341-11	MYLAR	330PF	5% 50V(G, IT)	
C255	1-130-467-00	MYLAR	470PF	5% 50V(G, IT)	
C256	1-164-346-11	CERAMIC CHIP	1uF	16V	
C257	1-124-477-11	ELECT	47uF	20% 25V	
C258	1-164-232-11	CERAMIC CHIP	0.01uF	50V	
C259	1-124-477-11	ELECT	47uF	20% 25V	
C260-263					
	1-164-232-11	CERAMIC CHIP	0.01uF	50V	
C264	1-164-005-11	CERAMIC CHIP	0.47uF	25V	
C265	1-124-477-11	ELECT	47uF	20% 25V	
C266	1-124-907-11	ELECT	10uF	20% 50V	
C301	1-164-098-11	CERAMIC	0.047uF	12V	
C302	1-124-477-11	ELECT	47uF	20% 25V	
C303	1-164-098-11	CERAMIC	0.047uF	12V	
C304	1-163-129-00	CERAMIC CHIP	330PF	5% 50V	
C306	1-124-477-11	ELECT	47uF	20% 25V	
C307	1-130-467-00	MYLAR	470PF	5% 50V	
C308	1-130-467-00	MYLAR	470PF	5% 50V	
C311	1-130-475-00	MYLAR	0.0022uF	5% 50V	
C312	1-130-475-00	MYLAR	0.0022uF	5% 50V	
C313	1-124-907-11	ELECT	10uF	20% 50V	
C314	1-124-907-11	ELECT	10uF	20% 50V	
C315	1-110-335-11	MYLAR	100PF	5% 50V	
C316	1-110-335-11	MYLAR	100PF	5% 50V	
C317	1-123-382-00	ELECT	3.3uF	20% 100V	
C318	1-123-382-00	ELECT	3.3uF	20% 100V	
C319	1-124-477-11	ELECT	47uF	20% 25V	
C320-322					
	1-164-346-11	CERAMIC CHIP	1uF	16V	
C323	1-164-005-11	CERAMIC CHIP	0.47uF	25V	
C324	1-164-346-11	CERAMIC CHIP	1uF	16V	
C325	1-124-477-11	ELECT	47uF	20% 25V	
C352	1-130-471-00	MYLAR	0.001uF	5% 50V(G, IT)	

TUNER **ENCORDER** **AC SW**

Ref. No.	Part No.	Description			Remarks
C353	1-130-471-00	MYLAR	0.001uF	5%	50V(G, IT)
C401-403					
	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C404	1-124-477-11	ELECT	47uF	20%	25V
C405	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C406	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C408	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C409	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V
C410	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C411	1-124-477-11	ELECT	47uF	20%	25V
C412	1-164-346-11	CERAMIC CHIP	1uF		16V
C413	1-164-346-11	CERAMIC CHIP	1uF		16V
C414	1-124-927-11	ELECT	4.7uF	20%	100V
C415	1-123-382-00	ELECT	3.3uF	20%	100V
C416	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C417	1-124-907-11	ELECT	10uF	20%	50V
C421	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C451	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C452	1-164-693-11	CERAMIC CHIP	0.0018uF	5%	50V
C453	1-163-145-00	CERAMIC CHIP	0.0015uF	5%	50V
C454	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C455	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C501	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C502	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C503	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C504	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C505	1-124-907-11	ELECT	10uF	20%	50V
C506-508					
	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C509	1-124-477-11	ELECT	47uF	20%	25V
C511	1-124-907-11	ELECT	10uF	20%	50V
C512	1-123-382-00	ELECT	3.3uF	20%	100V
C513	1-164-346-11	CERAMIC CHIP	1uF		16V
C514	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C551	1-124-907-11	ELECT	10uF	20%	50V
C552	1-164-346-11	CERAMIC CHIP	1uF		16V
C553	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C554	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C603	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C607	1-164-005-11	CERAMIC CHIP	0.47uF		25V
C608	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C611	1-104-905-11	CAP, DOUBLE LAYERS	0.22F		
C612	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C613	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C620	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C701	1-163-104-00	CERAMIC CHIP	30PF	5%	50V
C702	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C703	1-128-183-11	ELECT	470uF	20%	6.3V
C704	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C705	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C706	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C707	1-126-157-11	ELECT	10uF	20%	16V
C710	1-164-232-11	CERAMIC CHIP	0.01uF		50V

Ref. No.	Part No.	Description			Remarks
C711	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C801	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C802	1-124-925-11	ELECT	2.2uF	20%	100V
C803	1-124-477-11	ELECT	47uF	20%	25V
C804	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C805	1-163-135-00	CERAMIC CHIP	560PF	5%	50V
C806	1-163-115-00	CERAMIC CHIP	82PF	5%	50V
C808	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C809	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C817	1-124-907-11	ELECT	10uF	20%	50V
C818	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C901	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C902	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C903	1-124-910-11	ELECT	47uF	20%	50V
C904	1-124-910-11	ELECT	47uF	20%	50V
C905	1-124-618-11	ELECT	2200uF	20%	35V
C906	1-124-911-11	ELECT	220uF	20%	50V
C908	1-124-907-11	ELECT	10uF	20%	50V
C909	1-124-477-11	ELECT	47uF	20%	25V
C911	1-124-916-11	ELECT	22uF	20%	63V
C951	1-161-744-00	CERAMIC	0.01uF		400V
C952	1-161-742-00	CERAMIC	0.0022uF	20%	400V(G, IT)
C953	1-161-742-00	CERAMIC	0.0022uF	20%	400V(G, IT)
C954	1-164-232-11	CERAMIC CHIP	0.01uF		50V (G, IT)
		< FILTER >			
CF201-203					
	1-567-389-11	FILTER, CERAMIC			
CF231	1-567-107-71	FILTER, CERAMIC			
CF301	1-567-250-11	OSCILLATOR, CERAMIC			
CF402	1-527-981-00	FILTER, CERAMIC			
		< CONNECTOR >			
* CN701	1-564-341-11	PIN, CONNECTOR 7P			
* CN702	1-564-341-11	PIN, CONNECTOR 7P			
* CN901	1-564-321-00	PIN, CONNECTOR 2P			
CN951	1-564-321-00	PIN, CONNECTOR 2P			
		< JACK >			
CNJ301	1-568-250-11	JACK, PIN 2P (OUTPUT)			
		< DIODE >			
D151	8-719-016-74	DIODE	1SS352 (AEP, G, IT)		
D152	8-719-016-74	DIODE	1SS352		
D221	8-719-016-74	DIODE	1SS352		
D301	8-719-016-74	DIODE	1SS352		
D402	8-719-016-74	DIODE	1SS352		
D601	8-719-016-74	DIODE	1SS352		
D616-620					
	8-719-016-74	DIODE	1SS352		

Ref. No.	Part No.	Description	Remarks
D901-904			
	8-719-200-07	DIODE 10E2	
D905	8-719-022-74	DIODE UZM27B	
D906	8-719-021-61	DIODE UZM6.8Z	
		< FRONTEND >	
FE101	1-693-212-11	FRONT END (FTZ)	
FE421	1-236-462-11	ENCAPSULATED COMPONENT	
FE451	1-236-463-11	ENCAPSULATED COMPONENT	
		< FILTER >	
FL701	1-517-177-11	INDICATOR TUBE, FLUORESCENT	
		< IC >	
IC221	8-759-812-35	IC LA1235	
IC251	8-759-812-35	IC LA1235	
IC252	8-759-145-58	IC uPC4558C	
IC301	8-759-801-80	IC LA3401	
IC302	8-759-145-58	IC uPC4558C	
IC401	8-759-812-45	IC LA1245	
IC501	8-757-925-20	IC CX7925B	
IC601	8-759-164-12	IC uPD78013GC-518-AB8	
IC701	8-759-823-57	IC LC75711E	
IC702	8-749-923-43	IC GP1U57XB	
IC801	8-759-065-98	IC SAA6579T	
IC802	8-759-161-78	IC LC7073M-TE-R	
IC901	8-759-820-09	IC LA5667	
		< COIL >	
L351	1-410-470-11	INDUCTOR 10uH (G, IT)	
L352	1-410-470-11	INDUCTOR 10uH (G, IT)	
L451	1-408-425-00	INDUCTOR 220uH	
L601	1-410-482-31	INDUCTOR 100uH	
L701	1-408-421-00	INDUCTOR 100uH	
L801	1-410-482-31	INDUCTOR 100uH	
		< FILTER >	
LPF301	1-235-164-00	FILTER, LOW PASS	
LPF302	1-235-164-00	FILTER, LOW PASS	
		< TRANSFORMER >	
⚠PT901	1-423-525-11	TRANSFORMER, POWER	
		< TRANSISTOR >	
Q151	8-729-904-39	TRANSISTOR DTC114TS (AEP, G, IT)	
Q152	8-729-904-39	TRANSISTOR DTC114TS	
Q201-204			
	8-729-230-XX	TRANSISTOR 2SC2669OY	
Q231-233			
	8-729-904-39	TRANSISTOR DTC114TS	
Q234	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q235	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q236	8-729-230-XX	TRANSISTOR 2SC2669OY	
Q237	8-729-230-XX	TRANSISTOR 2SC2669OY	
Q301	8-729-141-30	TRANSISTOR 2SC3623A-LK	
Q302	8-729-141-30	TRANSISTOR 2SC3623A-LK	
Q451	8-729-231-20	TRANSISTOR 2SK161-YGR	
Q452-456			
	8-729-900-89	TRANSISTOR DTC144ES	
Q457	8-729-141-30	TRANSISTOR 2SC3623A-LK	
Q458	8-729-904-39	TRANSISTOR DTC114TS	
Q459	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q511	8-729-202-67	TRANSISTOR 2SK246-GR3	
Q512	8-729-201-84	TRANSISTOR 2SC3112-B	
Q521	8-729-900-89	TRANSISTOR DTC144ES	
Q522	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q523	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q551	8-729-202-67	TRANSISTOR 2SK246-GR3	
Q552	8-729-201-84	TRANSISTOR 2SC3112-B	
Q610	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q901	8-729-900-65	TRANSISTOR DTA144ES	
		< RESISTOR >	
⚠R101	1-249-401-11	CARBON 47 5% 1/4W F	
R151	1-216-097-00	METAL CHIP 100K 5% 1/10W (AEP, G, IT)	
R152	1-216-097-00	METAL CHIP 100K 5% 1/10W (AEP, G, IT)	
R153	1-216-018-00	METAL CHIP 51 5% 1/10W	
R154	1-216-018-00	METAL CHIP 51 5% 1/10W	
R155	1-216-011-00	METAL CHIP 27 5% 1/10W	
R156	1-216-023-00	METAL CHIP 82 5% 1/10W (AEP, G, IT)	
R157	1-216-023-00	METAL CHIP 82 5% 1/10W	
R201	1-216-033-00	METAL CHIP 220 5% 1/10W	
R202	1-216-001-00	METAL CHIP 10 5% 1/10W	
R203	1-216-037-00	METAL CHIP 330 5% 1/10W	
R204	1-216-077-00	METAL CHIP 15K 5% 1/10W	
R205	1-216-031-00	METAL CHIP 180 5% 1/10W	
R206	1-216-041-00	METAL CHIP 470 5% 1/10W	
R207	1-216-037-00	METAL CHIP 330 5% 1/10W	
R208	1-216-083-00	METAL CHIP 27K 5% 1/10W	
R209	1-216-037-00	METAL CHIP 330 5% 1/10W	
R210	1-216-077-00	METAL CHIP 15K 5% 1/10W	
R211	1-216-031-00	METAL CHIP 180 5% 1/10W	
R212	1-216-037-00	METAL CHIP 330 5% 1/10W	
R213	1-216-083-00	METAL CHIP 27K 5% 1/10W	
R214	1-216-037-00	METAL CHIP 330 5% 1/10W	
R221	1-216-037-00	METAL CHIP 330 5% 1/10W	
⚠R222	1-249-405-11	CARBON 100 5% 1/4W F	
R223	1-216-101-00	METAL CHIP 150K 5% 1/10W	
R231	1-216-037-00	METAL CHIP 330 5% 1/10W	
R232	1-216-077-00	METAL CHIP 15K 5% 1/10W	
R233	1-216-037-00	METAL CHIP 330 5% 1/10W	
R234	1-216-005-00	METAL CHIP 15 5% 1/10W	
R235	1-216-083-00	METAL CHIP 27K 5% 1/10W	

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

TUNER **ENCORDER** **AC SW**

Ref. No.	Part No.	Description				Remarks
R236	1-216-033-00	METAL CHIP	220	5%	1/10W	
R237	1-216-097-00	METAL CHIP	100K	5%	1/10W	
R238	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R239	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R240	1-216-077-00	METAL CHIP	15K	5%	1/10W	
R241	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R242	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R243	1-216-025-00	METAL CHIP	100	5%	1/10W	
R251	1-216-037-00	METAL CHIP	330	5%	1/10W	
R252	1-216-089-00	METAL CHIP	47K	5%	1/10W	
R253	1-216-093-00	METAL CHIP	68K	5%	1/10W	
R254	1-216-001-00	METAL CHIP	10	5%	1/10W	(AEP, UK)
R254	1-216-057-00	METAL CHIP	2.2K	5%	1/10W	(G, IT)
R255	1-216-057-00	METAL CHIP	2.2K	5%	1/10W	
R256	1-216-079-00	METAL CHIP	18K	5%	1/10W	
R257	1-216-063-00	METAL CHIP	3.9K	5%	1/10W	
R258	1-216-059-00	METAL CHIP	2.7K	5%	1/10W	
⚠R259	1-249-405-11	CARBON	100	5%	1/4W	F
R260	1-216-091-00	METAL CHIP	56K	5%	1/10W	
R261	1-216-089-00	METAL CHIP	47K	5%	1/10W	
R262	1-216-097-00	METAL CHIP	100K	5%	1/10W	
R264	1-216-067-00	METAL CHIP	5.6K	5%	1/10W	
⚠R265	1-249-401-11	CARBON	47	5%	1/4W	F
R268	1-216-073-00	METAL CHIP	10K	5%	1/10W	
⚠R271-273						
	1-249-393-11	CARBON	10	5%	1/4W	F
R301	1-216-057-00	METAL CHIP	2.2K	5%	1/10W	
R302	1-216-101-00	METAL CHIP	150K	5%	1/10W	
R303	1-216-101-00	METAL CHIP	150K	5%	1/10W	
R304	1-216-098-00	METAL CHIP	110K	5%	1/10W	
R305	1-216-098-00	METAL CHIP	110K	5%	1/10W	
R306	1-216-057-00	METAL CHIP	2.2K	5%	1/10W	
R307	1-216-057-00	METAL CHIP	2.2K	5%	1/10W	
R308-311						
	1-216-067-00	METAL CHIP	5.6K	5%	1/10W	
R312	1-216-063-00	METAL CHIP	3.9K	5%	1/10W	
R313	1-216-063-00	METAL CHIP	3.9K	5%	1/10W	
R314	1-216-041-00	METAL CHIP	470	5%	1/10W	
R315	1-216-041-00	METAL CHIP	470	5%	1/10W	
⚠R316	1-249-401-11	CARBON	47	5%	1/4W	F
R317	1-216-043-00	METAL CHIP	560	5%	1/10W	
R318	1-216-043-00	METAL CHIP	560	5%	1/10W	
R319-321						
	1-216-089-00	METAL CHIP	47K	5%	1/10W	
R322	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R323	1-216-085-00	METAL CHIP	33K	5%	1/10W	
R324	1-216-067-00	METAL CHIP	5.6K	5%	1/10W	
⚠R325	1-249-401-11	CARBON	47	5%	1/4W	F
R361	1-216-089-00	METAL CHIP	47K	5%	1/10W	
R362	1-216-089-00	METAL CHIP	47K	5%	1/10W	
R401	1-216-057-00	METAL CHIP	2.2K	5%	1/10W	
⚠R402	1-249-409-11	CARBON	220	5%	1/4W	F
R404	1-216-041-00	METAL CHIP	470	5%	1/10W	

Ref. No.	Part No.	Description				Remarks
R405	1-216-025-00	METAL CHIP	100	5%	1/10W	
R406	1-216-023-00	METAL CHIP	82	5%	1/10W	
R408	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R409	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R410	1-216-075-00	METAL CHIP	12K	5%	1/10W	
R411	1-216-069-00	METAL CHIP	6.8K	5%	1/10W	
⚠R412	1-249-407-11	CARBON	150	5%	1/4W	F
R413	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R421	1-216-097-00	METAL CHIP	100K	5%	1/10W	
R422	1-216-089-00	METAL CHIP	47K	5%	1/10W	
R451	1-216-097-00	METAL CHIP	100K	5%	1/10W	
R452	1-216-089-00	METAL CHIP	47K	5%	1/10W	
R454	1-216-121-00	METAL CHIP	1M	5%	1/10W	
R455	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R456	1-216-097-00	METAL CHIP	100K	5%	1/10W	
R457	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R458	1-216-097-00	METAL CHIP	100K	5%	1/10W	
R459	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R460	1-216-061-00	METAL CHIP	3.3K	5%	1/10W	
R501-503						
	1-216-073-00	METAL CHIP	10K	5%	1/10W	
⚠R504	1-249-400-11	CARBON	39	5%	1/4W	F
⚠R505	1-249-408-11	CARBON	180	5%	1/4W	F
R511	1-216-043-00	METAL CHIP	560	5%	1/10W	
R512	1-216-043-00	METAL CHIP	560	5%	1/10W	
R513	1-216-051-00	METAL CHIP	1.2K	5%	1/10W	
R514	1-216-037-00	METAL CHIP	330	5%	1/10W	
R515	1-216-055-00	METAL CHIP	1.8K	5%	1/10W	
R516	1-216-069-00	METAL CHIP	6.8K	5%	1/10W	
R517	1-216-065-00	METAL CHIP	4.7K	5%	1/10W	
R518	1-216-045-00	METAL CHIP	680	5%	1/10W	
R519	1-216-065-00	METAL CHIP	4.7K	5%	1/10W	
R521	1-216-061-00	METAL CHIP	3.3K	5%	1/10W	
R522	1-216-081-00	METAL CHIP	22K	5%	1/10W	
R551	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R552	1-216-043-00	METAL CHIP	560	5%	1/10W	
R553	1-216-051-00	METAL CHIP	1.2K	5%	1/10W	
R554	1-216-037-00	METAL CHIP	330	5%	1/10W	
R555	1-216-089-00	METAL CHIP	47K	5%	1/10W	
R556	1-216-069-00	METAL CHIP	6.8K	5%	1/10W	
R557	1-216-065-00	METAL CHIP	4.7K	5%	1/10W	
R604	1-216-025-00	METAL CHIP	100	5%	1/10W	
R611	1-216-073-00	METAL CHIP	10K	5%	1/10W	
⚠R613	1-249-401-11	CARBON	47	5%	1/4W	F
R614	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R620	1-216-025-00	METAL CHIP	100	5%	1/10W	
R621	1-216-073-00	METAL CHIP	10K	5%	1/10W	(IT)
R624	1-216-073-00	METAL CHIP	10K	5%	1/10W	(UK)
R626	1-216-081-00	METAL CHIP	22K	5%	1/10W	
R627	1-216-113-00	METAL CHIP	470K	5%	1/10W	
R640	1-216-025-00	METAL CHIP	100	5%	1/10W	

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description			Remarks
R641-643					
	1-216-057-00	METAL CHIP	2.2K	5% 1/10W	
R644	1-216-025-00	METAL CHIP	100	5% 1/10W	
R645	1-216-025-00	METAL CHIP	100	5% 1/10W	
R651	1-216-053-00	METAL CHIP	1.5K	5% 1/10W	
R652	1-216-053-00	METAL CHIP	1.5K	5% 1/10W	
R701	1-216-689-11	METAL CHIP	39K	0.5% 1/10W	
⚠R702	1-249-401-11	CARBON	47	5% 1/4W F	
R703	1-216-097-00	METAL CHIP	100K	5% 1/10W	
R704	1-216-097-00	METAL CHIP	100K	5% 1/10W	
R705	1-216-027-00	METAL CHIP	120	5% 1/10W	
R706	1-216-027-00	METAL CHIP	120	5% 1/10W	
R707	1-216-029-00	METAL CHIP	150	5% 1/10W	
R708	1-216-031-00	METAL CHIP	180	5% 1/10W	
R709	1-216-033-00	METAL CHIP	220	5% 1/10W	
R710	1-216-035-00	METAL CHIP	270	5% 1/10W	
R711	1-216-037-00	METAL CHIP	330	5% 1/10W	
R712	1-216-041-00	METAL CHIP	470	5% 1/10W	
R713	1-216-043-00	METAL CHIP	560	5% 1/10W	
R714	1-216-047-00	METAL CHIP	820	5% 1/10W	
R715	1-216-051-00	METAL CHIP	1.2K	5% 1/10W	
R716	1-216-057-00	METAL CHIP	2.2K	5% 1/10W	
R717	1-216-063-00	METAL CHIP	3.9K	5% 1/10W	
R718	1-216-075-00	METAL CHIP	12K	5% 1/10W	
R721	1-216-027-00	METAL CHIP	120	5% 1/10W	
R722	1-216-027-00	METAL CHIP	120	5% 1/10W	
R723	1-216-029-00	METAL CHIP	150	5% 1/10W	
R724	1-216-031-00	METAL CHIP	180	5% 1/10W	
R725	1-216-033-00	METAL CHIP	220	5% 1/10W	
R726	1-216-035-00	METAL CHIP	270	5% 1/10W	
R727	1-216-037-00	METAL CHIP	330	5% 1/10W	
R728	1-216-041-00	METAL CHIP	470	5% 1/10W	
R729	1-216-043-00	METAL CHIP	560	5% 1/10W	
R730	1-216-047-00	METAL CHIP	820	5% 1/10W	
R731	1-216-051-00	METAL CHIP	1.2K	5% 1/10W	
R732	1-216-057-00	METAL CHIP	2.2K	5% 1/10W	
R740	1-216-025-00	METAL CHIP	100	5% 1/10W	
⚠R801	1-249-401-11	CARBON	47	5% 1/4W F	
R802	1-216-057-00	METAL CHIP	2.2K	5% 1/10W	
R809	1-216-073-00	METAL CHIP	10K	5% 1/10W	
⚠R902	1-249-413-11	CARBON	470	5% 1/4W F	
R903	1-216-097-00	METAL CHIP	100K	5% 1/10W	
R904-906					
	1-216-089-00	METAL CHIP	47K	5% 1/10W	
		< VARIABLE RESISTOR >			
RV221	1-238-601-11	RES, ADJ, CARBON	22K		
RV231	1-238-599-11	RES, ADJ, CARBON	4.7K		
RV251	1-238-600-11	RES, ADJ, CARBON	10K		
RV301	1-238-604-11	RES, ADJ, CARBON	220K		
RV402	1-238-600-11	RES, ADJ, CARBON	10K		

Ref. No.	Part No.	Description	Remarks
RV701	1-466-513-21	ENCODER, ROTARY (TUNING)	
		< RELAY >	
RY151-153			
	1-515-614-11	RELAY (AEP, G, IT)	
		< SWITCH >	
S701	1-554-303-21	SWITCH, TACTILE (1)	
S702	1-554-303-21	SWITCH, TACTILE (2)	
S703	1-554-303-21	SWITCH, TACTILE (3)	
S704	1-554-303-21	SWITCH, TACTILE (4)	
S705	1-554-303-21	SWITCH, TACTILE (5)	
S706	1-554-303-21	SWITCH, TACTILE (6)	
S707	1-554-303-21	SWITCH, TACTILE (7)	
S708	1-554-303-21	SWITCH, TACTILE (8)	
S709	1-554-303-21	SWITCH, TACTILE (9)	
S710	1-554-303-21	SWITCH, TACTILE (0)	
S711	1-554-303-21	SWITCH, TACTILE (SHIFT)	
S712	1-554-303-21	SWITCH, TACTILE (BAND)	
S713	1-554-303-21	SWITCH, TACTILE (MEMORY)	
S714	1-554-303-21	SWITCH, TACTILE (DIRECT)	
S715	1-554-303-21	SWITCH, TACTILE (TUNING/PRESET)	
S716	1-554-303-21	SWITCH, TACTILE (CHARACTER)	
S717	1-554-303-21	SWITCH, TACTILE (DISPLAY)	
S718	1-554-303-21	SWITCH, TACTILE (DISPLAY MODE)	
S719	1-554-303-21	SWITCH, TACTILE (ANT) (AEP, G, IT)	
S720	1-554-303-21	SWITCH, TACTILE (ANT ATT)	
S721	1-554-303-21	SWITCH, TACTILE (IF BAND)	
S722	1-554-303-21	SWITCH, TACTILE (STEREO/MUTE)	
S725	1-554-303-21	SWITCH, TACTILE (PTY)	
S726	1-554-303-21	SWITCH, TACTILE (NEWS/INFO)	
S727	1-554-303-21	SWITCH, TACTILE (TA)	
S728	1-554-303-21	SWITCH, TACTILE (TUNE MODE)	
⚠S901	1-572-267-51	SWITCH, PUSH (AC POWER) (1 KEY) (POWER)	
		< TRANSFORMER >	
T251	1-235-126-00	ENCAPSULATED COMPONENT (G, IT)	
T252	1-404-845-11	COIL, DISCRI (PRIMARY)	
T253	1-404-846-11	COIL, DISCRI (SECONDARY)	
T401	1-404-713-11	TRANSFORMER, IF	
		< TERMINAL >	
* TM101	1-537-406-11	TERMINAL BOARD (ANT) (AEP, G, IT)	
TM101	1-537-406-21	TERMINAL BOARD (ANT) (UK)	
		< TEST PIN >	
* TP251	1-565-513-11	PIN, CONNECTOR 2P	

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

TUNER **ENCORDER** **AC SW**

Ref. No.	Part No.	Description	Remarks
		< VIBRATOR >	
X501	1-567-826-21	VIBRATOR, CRYSTAL 7.2MHz	
X601	1-579-599-21	VIBRATOR, CERAMIC 4.19MHz	
X801	1-579-900-21	VIBRATOR, CRYSTAL 4.332MHz	
X802	1-577-358-21	VIBRATOR, CERAMIC 4.00MHz	

****

MISCELLANEOUS
****

⚠18	1-575-651-11	CORD, POWER (AEP, G, IT)	
⚠18	1-696-570-21	CORD, POWER (UK)	

****

ACCESSORIES & PACKING MATERIALS
****

	1-501-374-11	ANTENNA, LOOP	
	1-501-594-11	ANTENNA (FM) (AEP, UK)	
	1-558-271-11	CORD, CONNECTION	
	3-756-648-11	MANUAL, INSTRUCTION (ENGLISH/FRENCH/SPANISH/PORTUGAL/CHINESE) (AEP)	
	3-756-648-41	MANUAL, INSTRUCTION (GERMAN/DUTCH/SWEDISH/ITALIAN) (AEP, IT)	
	3-756-648-51	MANUAL, INSTRUCTION (GERMAN) (G)	
	3-756-648-81	MANUAL, INSTRUCTION (ENGLISH) (UK)	
*	4-930-835-01	CUSHION	
*	4-944-049-61	INDIVIDUAL CARTON	

****

****
HARDWARE LIST
****

#1	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3
#2	7-682-548-04	SCREW +BVTT 3X8 (S)
#3	7-682-548-09	SCREW +B 3X8
#4	7-621-849-00	SCREW (BV/RING)

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

©1993.6

Published by Audio Sector Quality Assurance Dept.